Waucoma Huckleberry Enhancement Project
DRAFT - Summary of Comments from the Scoping Period

Comments Regarding Proposed Action	Additional Comments from Commenter
Reviving huckleberry production in the Waucoma unit will require the use of prescribed fire and all the hazards that entails. Thinning may be necessary to decrease crown density to revive huckleberry production. But thinning adds to surface fuels and increases air circulation which quickens surface fuel drying.	Anzenger, "Big Huckleberry and Forest Succession, Mt. Hood and Warm Springs Indian Reservation", 2002. (*Anzinger's OSU M.S. Thesis, 2002 is referenced in, "Ecology and Management of Big Huckleberry Literature Review", Friesen et. al, USFS, 2016.*)
The scoping ignores reducing surface fuels and raising crown density height.	Timber management can create excessive transpiration, droughty soils, over exposure, vegetative competition, mechanical damage, and scarification which cause poor growth and low fruit production.
Why are proposed openings limited to 5 acres? - Commenter supports the use of an amendment, but encourages consideration of larger openings to ensure longer-term production of huckleberries; FS return interval likely 20-years or more out	Suggest using the Good Neighbor Authority for opportunities to do cross-boundary work between FS and local land owners.
Support treatment in riparian areas to ensure resiliency to disturbances.	Why is there 3,025 acres of C1 lands not being treated?
Highlight species that will benefit from treatments.	Please review for additional timber removal opportunities designated Matrix lands.
Landscape heterogeneity is important for wildlife and vegetation resilience.	Emphasize the balance of economic, ecological, and social concerns in the reasons for creating this project.
Decommission only high priority roads, barricade lower priority roads.	Implement timber prep via DxP or DxD.
Include descriptions of the beneficial effects of the project.	Include an economic analysis showing revenues, revenues re-invested, and revenues related to Secure Rural Schools.

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Treat as many acres (the remaining 1,444 acres in Matrix) as possible (huckleberry fields, products to local communities, reduce wildfire risk).	Commenter supports the Purpose and Need.
Commenter encourages and supports the Plan amendments and exceptions proposed, and suggests openings larger than 5 acres due to 20-30 year time lapse before revisiting the area.	Commenter believes that harvesting timber to create jobs and maintain existing infrastructure should be part of the purpose and need.
Commenter supports management within Riparian Reserves, reduce the no-cut buffers to 1-2 conifers.	Consider the following literature: Janisch, Jack E., Wondzell, Steven M., Ehinger, William J. 2012. Headwater stream temperature: Interpreting response after logging, with and without riparian buffers, Washington, USA. Forest Ecology Management, 270, 302-313.
Treat/thin stands along the private land boundaries for WUI protection.	Consider the following literature: Warren, Dana R., Keeton, William S., Bechtold, Heather A. Rosi-Marshall, Emma J. 2013. Comparing streambed light availability and canopy cover in streams with old-growth versus early-mature riparian forests in western Oregon.
When assessing treatment areas and potential effects to the NSO consider: Larry L. Irwin, Dennis F. Rock, Suzanne C. Rock, Craig Loehle, Paul Van Deusen. 2015. Forest ecosystem restoration: Initial response of spotted owls to partial harvesting. And "NSO Canopy Condition" document.	Use DxP for partial harvest areas.
Consider field conditions rather than contract dates for seasonal restrictions.	Sell timber based on tonnage vs. lump sum.
Opportunity to provide for winter operations would benefit local markets.	

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Drop units 2, 3, 4, 5, 6, 8 (old growth) 33, 34, 40, 42, and 45 old growth, 33 (pikas), 33, 72 previously logged areas with large diameter legacy trees.	
Drop all areas of old-growth forest	
Include maximum tree diameter limits	
Assess slopes so that "treatment" does not take place on slopes that are impractical for berry-picking.	
Include scientifically accepted best practices for huckleberry restoration, including use of post-logging burning	
Drop the units in the NE corner of the project area (south of Warren Lake) because they include Roadless area characteristics that exist in the adjacent Roadless area.	
Use prescribed fire to enhance huckleberries instead of logging.	
5-acre openings or shelterwood thinning to 30% canopy cover is not consistent with LSR, or Riparian Reserve objectives.	
Plan amendments supported if treatments are focused in existing plantations.	
Agree with reducing canopy cover to 30%, best to reduce to 25% to develop quality forage for wildlife, and longer lasting huckleberry habitat.	Recommend that the Hood River Ranger District Wildlife Biologist collaborate with Jeremy Thompson ODFW (The Dalles) District Wildlife Biologist regarding big game management in the project area per FW-188, pp. Four-71.

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Gaps should be created in areas away from system roads; agree with 5-acre size.	Appreciate the interactive web map: http://www.arcgis.com/home/webmap/viewer.html?webmap=5610e760fc9c434490435267ab3ab188&extent=-121.9115,45.5582,-121.5523,45.6769
Most harvest in Matrix should be done in gaps or with heavy thin to support FW-194 and FW-195 on page Four-71 of the Forest Plan.	
Support the construction or reconstruction of temporary roads.	
Decompacted/closed temporary roads after implementation should be planted with native forage mix for deer and elk. Heavy slash deposits should be focused at the beginning of roads; and not impede deer and elk use patterns FW-190. Seed temporary roads with desirable species after completion of the project following TAR recommendations.	
Leave a small trail for hunters on roads to be decompacted to provide recreational hunting access.	
High use recreation area - close roads and convert to trails, what steps will be taken to improve recreational qualities on Waucoma Ridge?	RE: CEQ guidance to consider the effects of actions on Climate Change released last summer - project contribution to total timber sale emissions by the FS in western Oregon. Quantify the projected emissions from the project.
Has the Mt. Hood consulted with traditional food gatherers from the Warm Springs nation or other tribes? Is there a plan to use traditional controlled burning practices?	
FS should not experiment management techniques that remove canopy in an area of public lands that provides water for public use. If Proposed Action does decrease canopy to said percentage, then include short, medium, and long-term effects on streamflow include cited studies in comment letter (pg. 2).	Demonstrate how logging in Riparian Reserves is necessary, and that the action complies with all nine ACSOs in short-term and long-term. Map riparian reserves

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Supports and recommends actions that replace/remove culverts that impede fish passage or cause other ecological detriment. Requests itemized list prioritizing restoration efforts needed.	Please read this report and incorporate its findings into the PA for Waucoma: Willis, John L.; Roberts, Scott D.; Harrington, Constance A. 2018. Variable density thinning promotes variable structural responses 14 years after treatment in the Pacific Northwest. Forest Ecology and Management. 410: 114-125. https://doi.org/10.1016/j.foreco.2018.01.006
Follow the recommendations of the WFHRWA regarding the size of RRs within the Waucoma project area: • On North Fork Green Point Creek and Green Point Creek, extend the Riparian Reserve at least 3 site potential trees on the south sides (north aspects) to provide better thermal regulation within the Reserves. WA at 6-12. • Around Alaska yellow-cedar swamps, provide a Riparian Reserve width of at least one site potential tree beyond the edge. Ensure that concentrated areas of small patches are connected. WA at 6-12	Usefulness of artificially-created snags has been thrown into doubt. Reference: USDA Forest Service Gen. Tech. Rep. PSW-GTR-181. 2002
(Comment letter page 11) Commenter requests the FS document in the NEPA analysis and buffer on unit maps: • The southern portion of Unit 40 is crisscrossed by at least three streams, which do not always correspond to their locations on FS maps. The area is dominated by cedar, flat and very wet. We recommend keeping ground-based equipment out of these areas. • In addition to the seep documented above on Trail #610, two unmapped intermittent stream crossings also exist on this trail at 45.62913, -121.74833 and 45.63052, -121.75065.	Knowing that this project has a strong likelihood of adversely impacting legacy forest features, which in turn will have a significant impact of the healthy functioning of the remaining forest ecosystem, directly contradicts the assertion that the project will enhance biological diversity. This must be acknowledged and accounted for in the PA.
Units 68 and 70 are old thins done with skyline cable. Complexity is lacking in these stands, and this condition would be perpetuated if re-entry thinning occurs.	If the FS intends to improve spotted owl habitat, it must allow no degradation of high-quality habitat from the West Fork Hood River watershed as part of the Waucoma project. The authors (cited page 18 of comment letter) recommended that the target for canopy cover in stands managed for dispersing spotted owls should be at least 80%.

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Heading west down the #610 trail above Unit 70, there are seeps coming off the slope to the north, feeding an inboard ditch with skunk cabbage growing in it. Concerns about the agency's ability to survey these very steep slopes.	Commenter supports noncommercial treatments to improve owl habitat by creating few small gaps (dropping small trees and leaving on the ground) to help increase structural diversity. FS should consider this technique in replacement of proposed thinning, wherever deemed more appropriate to achieve improved habitat for the owl.
FS should exclude stands with high snag and large living tree densities from any logging and apply buffers on key snags and relatively large trees within proposed units.	Increased predation pressure on traditional prey of the northern spotted owl by the barred owl could indeed result in a local decline of species present in the Waucoma project such as northern flying squirrels.
In the PA, please provide specific stand information for any units proposed for logging within LSRs, and the ecological rationale for the actions proposed within these stands. In particular, please discuss the role of standing and down dead trees in enhancing biodiversity and the ecological impact of decreasing future snag retention by logging in LSRs.	A potential decrease in soil processing may also occur with the expansion of barred owls, since reduced numbers of burrowing small mammals would lead to subsequent declines in the rates of decomposition of organic matter and litter and mixing of forest soil.
The eastern portion of Unit 28 contains large old legacy trees, some Doug firs measured at 61 inches DBH, and western hemlocks measured at 41 inches DBH. Units 1-5 in the northeastern project area all include old growth characteristics. Unit 45 is erroneously labeled on stand maps as being 30-50 years old, however we found that the stand is dominated by mature trees, some measured up to 69 inches DBH. Where these mature forest structures exist retain no less than 40% of the canopy cover, retaining as much mid-story component of the stand as is feasible, retaining the largest trees in the stand, as well as retaining all legacy features.	The scoping letter did not indicate how the FS will manage the located survey and manage species. We request that the agency make this disclosure in forthcoming NEPA documents.
As an alternative to attempting to create early-seral habitat mechanically, we recommend reintroducing fire in the landscape, which could improve huckleberry production, and deer & elk forage, while also benefiting a host of other species. We encourage the agency to look to existing openings to take advantage of what forage opportunities these conditions provide, including identifying locations for prescribed burning in the Waucoma.	Please analyze the impact of Waucoma on the long-term viability of wolverine within the project area.

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Unit 68, and surely other units, contain numerous Mountain Beaver (Aplodontia) burrows Mountain Beaver tunnel/runway system perimeters are to be delineated • No machine use within these perimeters (except on top of a deep snowpack, which is not likely to occur as part of this project) • No mechanical site preparation within these perimeters, since any machine use will collapse nests and tunnels.	
Pika are known by the FS to exist in the project area, but commenter would like to highlight two areas of occurrence which are bordered on all sides by Unit 33 and 45 at 45°37'36.56"N, 121°44'45.44"W (Unit 33) and at 45.613259, -121.760281 (Unit 45). Pika should be monitored closely.	
Table 7.1 "Proposed road obliterations" in the WFHRWA includes several roads within the Waucoma project area, including segments of 2810, 2820, 2810-640, 2810-660, and 2810-650.	Unit 28 has the highest diversity of wildlife use that we have seen thus far.
Roads 2810, 2820, 2820-620 and 2821-620 are known to have issues with drainage functionality and structural stability that will require reconstruction work in the form of ditch reconditioning, culvert replacements, and roadbed reconditioning. Recently, a storm event caused a substantial culvert failure on FSR 2820, resulting in significant damage to the road. Please include these activities listed above in the Proposed Action for Waucoma to remedy these issues.	(pages 32-33 of comment letter) The FS must consider whether each road segment the agency decides to maintain on the system is needed to meet certain factors outlined in the agency's own regulation. Here, the FS should consider whether each segment of the road system within the project area is needed to: • Meet resource and other management objectives adopted in the relevant land and resource management plan; Meet applicable statutory and regulatory requirements; • Reflect long-term funding expectations; and • Ensure that the identified system minimizes adverse environmental impacts associated with road construction, reconstruction, decommissioning, and maintenance. Should also consider risks and benefits, and provide explanation if differing from TAR.

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Prohibit the construction of new permanent and "temporary" roads, except in limited instances were construction of a short segment of new road is coupled with and necessary for the decommissioning of longer and more damaging segments of existing road.	The Waucoma PA should include data regarding the projected increase of sediment from log haul on all roads used. If it is likely that sediment would increase from wet-weather hauling, the FS should also include these projections in the PA.
Effective road restoration actions have included boulders and slash being placed along the road, large berms, re-contouring/de-compacting, re-vegetating, and the removal of trash. We believe these actions, where implemented, have been effective and encourage the FS to employ these types of strategies within the Waucoma project area.	difficult to determine what 'restoration' means for this area because the plant associations used by the FS are based off an ideal condition without any disturbance, and climate change impacts what can grow currently and into the future
Commenter requests a commitment from the agency to enforce effective barricades on roads built or rebuilt for this project when operations are not occurring. This includes time when the area is still under contract but outside the normal operating season.	The Waucoma scoping letter states that "Recent treatments on the Mt. Hood National Forest demonstrate that an improved huckleberry response rate can be achieved by opening the canopy and reducing competing vegetation." Commenter requests that these past treatments and their results over time be detailed in the PA.

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To restrict access to temporary roads and skid trails built or rebuilt for this project when operations are not occurring (including between the normal operating seasons if work in sale unit in question is not complete in one season), please consider the following recommendations: • Between operating seasons and at the end of the contract, include seasonal erosion control measures such as water bar placement and diversion ditch creation; • Between operating seasons and at the end of the contract, include piling slash on the first few hundred feet of temporary road or skid trail, and placing boulders at the entrance to units from main road; •Incorporate skips to help obstruct unauthorized OHV use in thinned units. Leave a thick, "vegetated screen" along roads in areas where OHV use is expected based on past and current use. If there are areas within the units in question that would benefit ecologically from skips (such as seeps or other riparian areas), do not remove these in exchange for the vegetated screens, but look to achieve both the visual and ecological goals of the skips in these units; •Provide adequate Sale Administration staffing for workload, so that coverage is available when the assigned Sale Administrator is not working; •Require the Sale Administrator to discuss all requirements with contractor at pre-work meeting, review all pre-work discussions with contract representatives on site, and reemphasize as unit completion is eminent; •Require inspection by Sale Administrator before contractor's equipment is moved offsite; •Require implementation and effectiveness monitoring of PDCs by both Sale Administrator and other specialists, including during the harvest activities; and •After project implementation and before conclusion of the contract, fully implement and monitor effectiveness of these activities in order to impede further damage from unauthorized motorized access to units after thinning has taken place.	http://ewp.uoregon.edu/sites/ewp.uoregon.edu/files/WP_86.pdf We encourage the District to review this document to more fully assess the obstacles to burning which may be present, and how to potentially navigate them.

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Provide site-specific Project Design Criteria (PDCs) to ensure that detrimental soil conditions will not exceed 5% of the activity area. (Within B3 and B12 LUA).	We encouraged the agency to look to these permanent openings for increasing early-seral forage, since there is not an option of promoting conifer growth under the transmission corridor. Has this assessment of feasibility been done in the West Fork Hood River?
This could mean that if the FS were to burn for huckleberries in Waucoma, not only would they be creating more fire-resilient stands of trees, but they would also be doing the same for stands of huckleberries. This seems contrary to the very Purpose & Need of the project. The FS states that this project should be designed to achieve the objective of huckleberry enhancement in an economically viable way. To this point, we requests that fire use become an integral part of this project.	There is great potential for the Waucoma project area to eventually be managed as an Unroaded Recreation Area through a Forest Plan amendment. Change in management emphasis and Land Use Allocations only apply to the area from NFS Road 2820 south to the southern boundary of the Waucoma timber sale planning area (approx.. 72% of area). The RRs should remain as an overlay on the Unroaded Recreation Area. In this scenario, the area north of NFS Road 2820 can remain as Matrix land with a timber management emphasis (approx. 28% of area
2008 Huckleberry Summit to the Confederated Tribes of Warm Springs, BIA Sale Planner Matt Jimenez disclosed the preliminary monitoring results that the stands that were logged over a 3 ft. snow pack had an immediate flush of berries the first season following logging, whereas huckleberry in areas logged over partial or no snow pack had much longer recovery times. Commenter requests the FS incorporate these findings into the Waucoma project and include a PDC requiring logging over snow for all units for which the Purpose & Need is enhanced huckleberry production.	Please do not use the same climate change “analysis” that has appeared in both the Polallie Cooper and Crystal Clear NEPA documents. Encourage the FS to engage with and include http://www.pnas.org/content/115/14/3663
Many of the areas proposed for logging in the Waucoma scoping letter are steep, remote, and completely inaccessible by most people on foot. It is not appropriate to include Unit 56 and other stands which are adjacent to the North Fork Green Point Creek in any proposal to promote huckleberry picking opportunities. Commenter requests that stands which are not accessible for huckleberry harvest be removed from the project, as since their treatments will not meet the Purpose & Need.	Consider alternatives that would make the action and affected communities more resilient to the effects of a changing climate. The FS should also choose mitigation measures to reduce action-related GHG emissions or increase carbon sequestration in the same fashion as they consider alternatives and mitigation measures for any other environmental effects

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Treat yellow-cedar as a minor tree species and protect it within units whenever possible.	The FS must analyze the impacts of the proposed logging in the broader context of climate change and acknowledge that the historic impacts of these activities will be exacerbated by climate change. The FS must then commit to specific management actions to address the increased impacts of these threats now and to take additional actions as necessary.
Ensure that recreational values are not adversely affected by logging through the inclusion of PDCs that include very large trail and campground buffers. Additionally, commenter does not support any actions which would impact visual quality from any of these sites, especially the Unit 45 which surrounds Black Lake, contains steep slopes, and is in an LSR and RR. An immediate action that the FS should take is to drop Unit 45, which, apart from bordering the lake, includes mature and old growth forest habitat, several unmapped riparian areas, and a large wet meadow adjacent to the Rainy Whatum trail upslope	For example, the BLM's Hole in the Road EA in which did just that). How many tons of carbon will the Waucoma project emit into the atmosphere during and after project implementation from logging operations and decay? How much carbon sequestration does the project area currently sequester? How much sequestration capacity will be lost, and for how long? How will the forests' resiliency to a changing climate be affected by the logging and road building? The FS should be quantifying climate change emissions from all of its projects and taking the analysis a step further to examine the carbon tradeoffs, including carbon emitted from the project and the loss of future carbon sequestration because of the project.